REMARKS

In the Office Action, dated August 2, 2007, the Examiner states that Claims 1-21 are pending, of those Claims 1-4 and Claims 6-21 are withdrawn, and Claim 6 is rejected. By the present Amendment, Applicant amends the specification and the claims.

In the Office Action, Claim 5 is objected to for the word "sol" in line 2. The Applicant disagrees with this rejection because the Applicant intended to mean "sol solution" and this is not a typographical error. Therefore, the Applicant respectfully requests that this objection be withdrawn.

In the Office Action, the disclosure is objected to because the word "neutral" is misspelled In the third paragraph on page 21. The Applicant has corrected the misspelling, and therefore, the objection should be overcome. No new matter has been added.

In the Office Action, Claim 5 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Applicant has amended Claim 5 by further defining "fluoroalkylsilane" and "alkyl silicate," and therefore the Applicant respectfully requests this rejection be withdrawn.

In the Office Action, Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kobayashi et al. (EP 0932081) in view of Yoichi et al (JP 2000-053421). The Applicant respectfully disagrees with and transverses this rejection. The present application claims a method of preparing a coating solution for forming a wettability-varied pattern by mixing a neutral sol solution of titanium oxide, whose pH is in a neutral range and which contains titanium oxide and alkyl silicate, and a solution of hydrolyzed fluoroalkylsilane, wherein pH of the solution of hydrolyzed fluoroalkylsilane is adjusted in advance such that pH of the coating solution for forming a wettability-varied pattern to be prepared would become in the range of 5 to 9. Accordingly, the method of producing a coating solution for forming a wettability-caried pattern recited in the present application produces a coating solution for forming a wettability-varied pattern containing titanium oxide, alkyl silicate and fluoroalkylsilane by mixing the neutral sol solution of titanium oxide and the solution of hydrolyzed fluoroalkylsilane. Specifically, the neutral sol solution of titanium oxide and solution of hydrolyzed fluoroalkylsilane are separately prepared in advance and

then mixed. This feature allows the formation of a wettability-varied pattern which has an excellent dispersion state of titanium oxide, alkyl silicate and fluoroalkylsilane. In general, fluoroalkylsilane is hydrolyzed under acidic conditions and is not easily hydrolyzed under neutral conditions and fluoroalkylsilane is easily hydrolyzed when heat is applied thereto; therefore, if a coating solution containing titanium oxide, alkyl silicate and fluoroalkylsilane is prepared from the beginning, the dispersion state of titanium oxide would be deteriorated. Thus, the present invention, which claims a method of separately preparing the neutral sol solution of titanium oxide and the solution of hydrolyzed fluoroalkylsilane in advance and then mixing the solutions, allows the preparation of a coating solution for forming a wettability-varied pattern containing titanium oxide, alkyl silicate and fluoroalkylsilane while maintaining the excellent dispersion state of titanium oxide.

In contrast, Yoichi discloses the neutral sol solution of titanium oxide recited in the present application; however, it is silent regarding the inclusion of fluoroalkylsilane. Moreover, there is no motivation found in Yoichi to have the titanium oxide sol contain fluoroalkylsilane.

Kobayashi discloses a photocatalyst-containing layer using fluoroalkylsilane as a binder, but it is silent regarding a coating solution for forming a pattern which forms the photocatalyst-containing layer and the producing method of the coating solution.

Accordingly, a person skilled in the art would not find the method of producing a coating solution for forming a wettability-varied pattern as claimed in the present application obvious in view of Yoichi and Kobayashi.

By this amendment, the Applicant adds new Claims 22-27. Claims 1-4 and 6-21 are being cancelled without prejudice to any divisional application that may be filed later.

In light of the foregoing response, all the outstanding objections and rejections are considered overcome. Applicant respectfully submits that this application should now be in condition for allowance and respectfully requests favorable consideration.

Respectfully submitted,

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